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POOR CONDITION OF TOOLS BLOCKS SPREAD OF HIGH-SPEED CUTTING

HIT SNAGS IN HIGH-SPEED CUTTING -- Moskovskiy Bol'shevik, No 256, 29 Oct 49

An obvious prerequisite for high-speed metal cutting is the perfect mechanical condition of the machine tool. Where maintenance and repair are inadequate, high-speed methods are impossible. In other words, high-speed cutting is out of the question at the Krasnyy Fakel', Pod'yemnik and Internal Grinding Machine plants, where almost every other tool is in need of repair.

A second prerequisite is a regular supply of high-quality hard-alloy cutting tools of proper geometric design. Among the plants lacking such a supply are the Pod'yemnik, the Metallokonstruktsii Plant in Ramenskoye, the Yegorov'yevsk Machine-Tool Building Plant, the Moscow Fire-Engine Plant and a number of others.

SCORE PLANT DISORGANIZATION -- Moskovskiy Bol'shevik, No 283, 2 Dec 49

The Moscow Machine-Tool Plant imeni Ordzhonikidze is having trouble with production. While output has been considerably increased through high-speed metal cutting in the machine sections, their achievements are nullified in the backward fitting and assembly sections. The latter work by fits and starts and meet the plan by last-minute speed-up. The rest of the time, both men and machines remain idle.

The speed-up is due mainly to the poor organization of supplies of castings and accessories, weakness in the design bureau, and serious internal faults of coordination. All these shortcomings are attributable to the plant's managing personnel, but there are also external factors which influence production.

The plant's chief supplier of castings is the Stankolit Plant of the Ministry of Machine-Tool Building. As a rule, it does not deliver full complements of castings. Many of its products are defective and bring about rejects in the plant. In September and October, 40 different complex parts produced were rejected because the castings used had been poorly executed with regard to geometrical proportions.

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The Machine-Tool Plant has a casting base of its own in Tula, which puts out castings up to 100 kilograms. In the current year, moulding areas were enlarged in its matrix and nonferrous-metal casting shops, and production doubled. However, this has not helped matters because here, too, there are a great number of rejects.

For example, the plant requires each month dozens of high-pressure oil cylinders, each of which is an individual casting requiring a separate matrix. In shop No 5, however, 65 percent of the cylinders were rejected because they turned out to be too porous; under pressure testing, they allowed the oil to seep through.

As a result of these difficulties, the majority of the shops at the Machine-Tool Plant imeni Ordzhonikidze are producing at only 60-80 percent of capacity, and what is produced is not dispatched on schedule or in proper amount.

KUYBYSHEV PLANTS IMPROVE METHODS -- Pravda, No 319, 15 Nov 49

Several Kuybyshev plants have improved production through new methods.

The Machine-Tool Building Plant, having instituted machine-molding, has reduced the margin of metal to be worked, and hence the machining time, 30 percent.

The Bearings Plant has introduced stamping of bearing races in closed molds. Here, too, metal margins have been reduced with resultant savings of dozens of tons of metal and 10 percent of working time. The forging shop in this plant now stamps its blanks; as a result, metal margins have been reduced 30 percent. Consumption of high-grade steel has been reduced 15 percent.

The Machinery Plant has increased the output of finished products almost 5 times through the introduction of more than 20 new labor-saving devices.

The Kuybyshev Industrial Institute is carrying on extensive work at the Bearings, Machine-Tool Building and other plants. As a result of its experiments, cutting speeds for cast-iron products have been greatly increased, the vortical method of screw-cutting introduced, and valuable data for the design of a new high-speed machine tool obtained.

SUBSTITUTE AIR FOR OIL IN BEARING LUBRICATION -- Moskovskiy Bol'shevik, No 280, 29 Nov 49

At the Second All-Union Conference on Friction and Wear in Machines, it was disclosed that many branches of machine-building are substituting air for oil as a bearing lubrication, where the part revolves at a high velocity and is subjected to only light pressure.

In other enterprises, especially in Moscow, graphite is used as a bearing lubricant where high temperatures prohibit the use of oil.

The tractor industry has been utilizing a new bearing alloy, babbitt BT-1. The use of this alloy has saved the industry about 100 tons of tin in a year.

MACHINE-TOOL PLANT EXCEEDS NORM -- Leninskoye Znamya, No 220, 6 Nov 49

The Voronezh Machine-Tool Building Plant has turned out ten powerful pneumatic hammers above plan. The plant overfulfills the norm each month and has already reached the level planned for 1951.

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ENTERPRISES GET NEW MACHINE TOOLS -- Leninskoye Znamya, No 226, 16 Nov 49

The Petrozavodsk Metal Plant of the Administration of Industrial Cooperatives has received a new machine tool for boring, drilling, and threading large work pieces. It has also gotten a new lathe especially designed for high-speed metal working.

The central repair shops of the Yuzhkarelles (Southern Karelian Timber) Trust have recently been equipped with centerless- and face-grinding machines.

The Petrozavodsk Ship-Repair Plant has just received two new-type welding machines from Moscow.

COMPLETE FIVE-YEAR PLANS

Liyepaya "Metall" Tool Plant, all indexes -- Sovetskaya Latviya, No 277, 25 Nov 49

Saratov Machine-Tool Building Plant, all indexes -- Krasnyy Flot, No 278, 25 Nov 49

COMPLETE 1949 PLANS

Yerevan Machine-Tool Building Plant imeni Dzerzhinskiy -- Kommunist, No 263, 6 Nov 49

Vitebsk Machine-Tool Building Plant imeni Komintern -- Sovetskaya Belorussiya, No 221, 6 Nov 49

First State Bearings Plant imeni Kaganovich -- Kommunist, No 279, 27 Nov 49

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